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Art. XX:-Oin some Australian Curculionoidea. Part 2.
By CHARLES OKE.
[Read 14th December, 1933; issued separately 7th May, 1934.]
This article contains the description of two new genera, eight. new specics, and one new variety, with some notes on previously described species, and is in continuation of my first part on this superfamily. A new genus, Ipsocossonus, has been proposed in the fanily Ipidae. The typical species looks very like some of the true weevils, belonging to the subfamily Cossoninae, but this appearance is only superficial, as its characters are certainly those of Ipidac. In the family Anthribidae a new species of Allochromicis has brought this beautiful genus, hitherto known only from Queensland and New South Wales, into the Victorian lists. In the true weevils, a small species of Rhadinosomus is described, four new species have been added to the genus Mandalotus, a new variety of Isacantha papulosa Pasc. is noted, and a new genus, Cisolca, has been proposed for a very interesting species found in Northern New South Wales, with only three tarsal scgments, which has been rather doubtfully referred to the Rhyparosominae.

## Family IPIDAE.

## Section MIXODENTATAE.

## Ipsocossonus, n. gen.

Body elongate, subcylindric, finely pubescent. Head small, round, deflexed, produced into a short rostrum, with distinct, transverse antennal scrobes. Antennae rather short; scape curved, same length as funicle; funicle of seven segments, the first and sccond elongate, the others transverse ; club ovate, of four segments. Eyes large, transverse, subelliptic, facets of moderate size. Mandibles short and broad, trilobed on inner edge. Maxilla with its chewing-edge furnished with spines and hairs, the outer edge with a few long hairs; palpi of three segments. Labium elongate, narrowed to apcx, where there are three groups of long hairs; palpi of three scgments; the first stout, the second small, transversc, the third small, round. Prothorax longer than wide, slightly produced over head, hollowed on its lower-anterior edge, and deeply grooved to front coxae. Scutellum very small, rounded behind. Elytra elongate, striate-punctate. Mesosternum very short, with episterna and epimera well developed. Metasternum long, lightly sulcate down centre ; episterna fairly wide. First segment of abdomen as long as next three combined, second, third, and fourth subequal, fifth
about twice the length of fourth. Anterior coxae almost touching, intermediate well separated, posterior a little further apart. Legs fairly long; fomora lightly compressed; tibiae strongly compressed and widened to apices, which are obliquely grooved for tarsi and strongly spurred, the outer edge strongly denticulate; tarsi of moderate length, the first scgment longer than the second, second and third equal, fourth a little longer than first, without a basal node.

This genus is proposed for a species that has the appearance of belonging to the Cossoninae rather that to the Ipidac. Its long narrow form, almost glabrous body, and the rostrum, with distinct scrobes, are suggestive of Cossoninae; but by the nongeniculate antennae, the denticulate tibiae, and the mouth parts, it must be referred to the Ipidae. The inner edge of the maxilla having both spines and hairs would place the genus in Hagendorn's scetion Mixodentatac, but it has little in common with the only genus placed there in Wytsman's Gen. Insectorum( 8). There is no sign, even in a balsam slide, of the node at the base of the fourth tarsal segment, so uswal in this family.

Genotype, I. anomalus, n. sp.

## Ipsocossonus anomalus, n. sp.

(Figs. 1-7.)
Piceous. Uppersurface very sparsely clothed with short yellowish pubescence, except near apex of rostrum, where it is fairly long and plentiful; undersurface moderately clothed with pale ashen pubescence. Subopaquc. The whole insect covered with fine criss-cross lines.

Head convex, thic base with small, dense punctures, becoming larger and distinctly umbellicate on frons and rostrum. Rostrum narrower than head, lightly cmarginate at apex, and with a distinct median carina from base to apex. Antennac with scape a little longer than funicle, strongly curved, clavate at apex; first segment of funicle curved, thin at base, suddenly clavate near apex, second obconical, third to seventh transverse, increasing in width; club large, nearly length of funicle. Prothorax widest abont apical fourth, the apex recurved, with angles widely rounded off, the base truncate with angles lightly rounded; with large, subreticulate, umbellicate punctures. Elytra about twice as long as prothorax, base truncate, with angles lightly rounded off, sides parallel to apical slope, apex roundcd; the striae with fairly large punctures, the interstices rugulose. Metasternum and abdomen with rather small punctures on the disc but much larger on sides and episternae. The apical segment of abdomen with a large, shallow impression. Legs roughly punctured all over; all the tibiac with three large teeth ncar apex and several small ones on outer cdge. Length, 4.25 mm .

Hab. Victoria: Violct Town (C. Okc).

A very distinct species from any previously described from Australia, or, as far as I have becn able to ascertain, from elsewhere. The two specimens examined were taken from an old $\log$ and are alnost certainly males, as the apical half of the metasternum has a moderately wide and deep channel and the apex of the abdomen is distinctly foveate.

Type in coll, Oke.

## Family ANTHRIBIDAE.

## Allochromicis montanus, n. sp.

(Fig. 8.)
Scarlet and blackish-brown. Moderately clothed with fairly long, white, black, and reddish pubescence.

Head moderately convex, densely longitudinally strigose. Eyes large, elliptic, strongly facetted. Rostrum rather strongly dilated to apex, about twice the length of width at apex; with a fine median carina from base to near apex and a finer onc on either side from base to insertion of antennae; from base to insertion of antennae with fine reticulate punctures, becoming substrigose near apex. Antennae modcrately stout, second segment same thickness as, and longer than visible part of first, longer and stotiter than third, third to sixth decreasing, seventlo and cighth increasing again, eighth about as long as wide, nintl and tenth suddenly much wider, subequal, eleventh one and a half times as long as tenth, bluntly pointed. Prothorax widest at subbasal carina, where it is equal to the lengtli; subbasal carina arcuate, nearer base in centre than on sides. Elytra wider than prothorax, with a shallow, oblique impression across basal fourth, with rows of large punctires in fceble striae, the interstices with fine close punctures. Undersurface of rostrum and prosternum with close, large punctures; metasternum and abdomen with sparse, fine punctures. Length. 4 mm .

Hab. Victoria: Warburton, Mount Donna Buang at 4,048 feet. (C. Oke.)
(Figs. 1-20.)
1-7.-Ipsocossonus anomalus, 11. sp.: 1. Imago. 2. Antenna. 3. Maxilla. 4. Two spines of maxilla. 5. Labium. 6. External portion of mandible. 7. Part of intermediate leg.
8. Allochromicis montanus, n. sp. 9. Rhadinosomus parvus, n. sp. 10. Antenna of same. 11. Antenna of R. lacordairei Pasc.

12-20.-Parts of legs of male Mandaloti, except 18 , which is of a female: 12-14. M. luciphilus, n. sp.; 12. Anterior. 13. Intermediate. 14. Posterior (inner side). 15-16. M. exilis, n. sp.: 15. Anterior. 16. Posterior. 17-20. M. sternocerus Lea,: 17. Anterior. 18. Anterior (female). 19. Posterior. 20. Posterior femur.


The type when alive was bright scarlet and piceous, and still is when wetted, but ordinarily the brighter colour has faded to salmon. The prothoras is dark, except the apex and centre of base of pronotum; there is a black band around the centre of each fentur and the apices of the tibiae are infuscated, as also are the ninth and tenth segments of antennae. The dark markings on the elytra are the suture and two interstices from base to basal third, from the outer edge of which an oblique fascia runs towards the apical third of margin, but does not quitc attain the margin, and part of the apical declivity is infuscated. The abdomen is convex throughont.

This species is nearer A. bifasciatus Lea (3) than the other two described species, but the apical segment of antenna is paler than tenth, the elytral markings and its puncturation are also diffcrent. In the present species all the larger punctures on the the elytra are in rows.

Types in coll. Oke.

> Family CURCULIONIDAE.
> Subfamily BRACHYDERINAE.
> Rhaminosomes parves, n. sp.

(Figs. 9, 10.)
Dark reddish; with head, rostrum, abdomen, antennae, tarsi, and apical mucros of elytra piceous. Moderately clothed with thin, elongate, whitish scales, these becoming round on sides of elytra, where they are condensed in the middle into a short oblique vitta.

Head lightly widened from base to eyes, where it is strongly impressed; with large, round, rongh punctures. Rostrum dilated to apex; punctures as on head. Antennae with scape strongly curved, clavate at apex; funicle with first segment curved and longer than second, second to sixth subequal. seventh much wider and clasping club; club as long as three preceding combined. Prothorax subcylindric, incurved on sides from base to near coxac; with fine, transverse strigosity and a fow large punctures on anterior portion. Elytra widened from base to about middle and then abruptly narrowed to apex ; apex of each elytron produced into a fairly long mucro: striae with rows of close punctures, wider than the interstices. Length, 5.50 mm .

## Hab. New South Wales: Dorrigo, (C. Oke.)

Distinguished from $R$. lacordaire Pasc. ( 7 ) by its small size and antennae and from $R$. frator Bl.(1) (which Lea(2) thought was the same species as Pascoe"s) by its antennae and the head impressed between the eyes. Numerous specimens were seen on a small, rather prickly, shruh.

Types in coll. Oke.

# Subfamily LEPTOPLNAE. 

Mandalotus sternocerus Lea.
(Figs. 17-20.)
Lea, Proc. Linn. Soc: N.S.W., lii., p. 357, 1927.
This speeies was noted as from Victoria only. A pair, one of each sex, which I took near Ballarat, agree with the description in all partieulars. But the hind femora might easily be eonsidered as dentate at the apex, in faet they are more so than in some species of the Cryptorhynchinae. Figures are given for comparison with other speeies.

## Mandalotus decipiens Lea.

Lea, Trans. Roy. Soc. S. Aust., xxxvi., 1914.

I obtained a single male of this species right on top of Mount Koseiusko, New South Wales. It is evidently an alpine form.

First record for New South Wales.

## Mandalotus graminicola Oke.

Oke, Proc. Roy. Soc. l'ic. (11.5.), xliii. (2), p. 186, 1931.
Lea gave this as a synonym of his $M$. rufipes(6), but in this I think that he was in error, and that it is more likely that $M$. rufipes Lea and $M$. denticulatus Lea are the same speeies.

In M. graminicola Oke the pronotum is less dilated than in M. denticulatus Lea, and the fentales of the latter are larger than those of the former. Lea deseribed the separation of the front eoxae in M. denticulatus as touching, and I took that as my guide in so describing M. graminicolt, as the front eoxae are the same in the two speeies, taken male to male and female to female; in the latter sex they are a little further apart. Lea did not have a female of my species when he wrote his note. For the present the three names must stand.

## Mandalotus medcoxalis I.ea. <br> Rec. S.A. Mus., iii., p. 179, 1926.

In the deseription of this speeies Lea said, "hind (tibiae) with an oblique ridge on lower surface" and in the note below: " The ridge on the hind tibiae from the sides appears as a small tooth," and was so noted in the key (4). The illustration (5) shows quite a distinet sharp tooth. I obtained three males at Dorrigo, the type loeality, only one of which could be said to be dentate, the second is distinetly ridged, while the third is so indistinctly ridged that it is scarcely traceable.


The tubercles on the elytra are, on first interstice: a semiconjoined one on edge of apical slope and a slightly larger onc half way down apical slope; on third interstice: an elongate one on base (largest on elytra) a post median (second largest) and a small one on edge of apical slope; on fifth: a small one on the base and a small antemedian; on sixth: a fairly large one on edge of apical slope and one, slightly sharper, down the slope, on margin of elytra; on seventli: a small one just behind the shoulder and a small submedian.

Types in coll. Oke.

## Mandolotus luciphilus, 11. sp.

(Figs. 12-14.)
Blackish-brown, legs and antennae diluted with red. Densely clothed with muddy-brown scales, interspersed with palc, curved setae; anterior tibiae with soft, short setae, but not ciliate.

Male.-Rostrum short and stout, median carina not traceable. Antennae fairly long. Eyes rather small and round. Prothorax lightly transverse, widest about apical third, thence gradually decreasing to base and suddenly to apex; surface moderately uneven. Elytra conjointly arcuate at base, rather suddenly widened to st:bhumeral process and then evenly narrowed to apical slope; suture posteriorly and parts of odd interstices lightly elevated; punctures in striae appearing small through clothing, but mostly obscured. Metasternum and basal segment of abdomen widely, but not deeply, depressed. Front and middle coxae narrowly and equally separated; the middle coxae ridged and produced into an oblique tooth. Anterior tibiae thickened to basal third then obliquely cut away and again, sinuately, thickened to apex, which is spurred; on the hollowed part it is roughened or feebly denticulate. Intermediate tibiae sharply dentate at apex; posterior lightly arched, with threc carinae near apex. Length, 4.25 mm .

Hab. New South Wales: Paterson (C. Oke), attracted to camp light.

The pronotum before abrasion appears to have about nine sub-tubercular swellings. On abrading a small part of pronotum it was seen to have fairly numerous, but feebly defined, nodules, without any definite arrangement.

The anterior and intermediate coxae narrowly and equally separated seems to make a new section, NNNN, necessary for this species. If it be referred to NN it would fall beside M. tibialis Lea, which is a very different species. It is closer to the description of $M$. oryomus Lea and M. medianus Lca, but with prothoracic granules not transversely arranged and tibiae different.

Type (unique) in coll. Oke.

## Mandalotus exilis, n. sp.

(Figs. 15, 16, 23.)
Black, antennae and legs reddish. Densely clothed with dingy, variegated scales, interspersed with short, curved, stout setae; undersurface with very short, sparse pubescence.

Male.-Rostrum stout and curved; median carina obsolete. Antennae moderately long. Prothorax transverse, strongly rounded on the sides; without a median impression; with fairly distinct granules, even before abrasion, showing a rather feeble transverse arrangement. Elytra conjointly arcuate at base, subhumeral notch very faint, evenly narrowing to apex; interstices feebly raised, striae with punctures appearing small through clothing, but on abrasion seen to be as wide as interstices. Undersurface with rather small, distinct punctures. Metasternum and basal segment of abdomen with a wide and fairly deep impression, this bounded behind by a short, straight carina, almost at apex of segment, the ends of the carina produced into small points. Anterior and intermediate coxae equally, and rather widely, scparated. Tibiae spurred at apex; anterior appearing bisinnate from the sides, with the apical sinus longer and deeper than the basal.

Female.-Differs in having the prothorax narrower, the elytral punctures smaller, the abdomen convex and withont a carina, and the anterior tibiae less sinuate. Length, 2.50-2.70 mm.

Hab. Victoria: Bendigo (C. Oke), Castlemaine (E. Nye).
In the Key (4) falls beside M. recticarinatus Lea, from which it differs in not having a medial impression on pronotum and in having the impression on basal segment of abdomen. From some directions there appears to be a distinct tubercle at either end of the abdominal carina, but from other angles they are seen as part of the carina itself.

The sides of the prothorax are whitish on all the specimens, and on the types there is a white vitta down each elytron, but these are not so noticeable on two other females from Bendigo.

Types in coll. Oke.

## Mandalotus lucaris, n. sp.

Piceous, appendages diluted with red. Rather densely clothed with m1ddy-brown, yellowish, and greyish scales, giving a variegated appearance, but not forming any definite pattern; interspersed with minmerous short, curved setae.

Male-Rostrum short and constricted near base. Eyes fairly large, separated by about the width of an eyc. Antennae of moderate length; first segment of funicle thin at base and suddenly swollen near apex, where it is much wider than second, second shorter than first, the others transverse, club of moderate cize. Prothorax lightly transverse, surface not visible through
clothing, but on abrasion, finely and closely punctate. Elytra feebly trisinuate at base, lightly widening to apical slope, then suddenly narrowed to apex; suture lightly raised posteriorly; punctures appearing small through the clothing, but wider than the interstices. Metasternum and basal segment of abdomen with a fairly large impression common to both and bounded behind with a short, curved carina on apex of segment. Anterior coxae moderately separated, but less than intermediate pair. All tibiae obtusely spurred at apex; anterior lightly curved near apex; posterior thinned on inner side near, then clubbed at, apex.

Female.-Differs in being a little wider across elytra, in the metasternum and abdomen being convex and without a carina, and the posterior tibiae not thinned near apex. Length, 2.30-2.75 mm.

Hab. New South Wales: Dorrigo (C. Oke), under decaying laves in a small grove.

In the Key (4), this would be placed at DD. ss. with M. blackburni Lea, which is a much larger and very different species. It is of about the same size as M. exilis, n. sp., but the prothorax of the latter has distinct granules and a very different carina, and its anterior coxae are further apart.

Types in coll. Oke.

## Subfamily RHYPAROSOMINAE.

Cisolea, n. gen.
Body short, robust; squamose and setose; apterous. Head subglobular, shagreened on base. Rostrun rather shorn, stout, and arcuate ; with a nitid triangular space on apex. Submentum with a short, broad peduncle. Mandibles protruding a little, pincer-shaped, tonthed on inner edge. Scrobes deep, showing on upper surface in front of antennae, but not quite reaching the buccal fissure, and rumning obliquely to lower margin of eyes. Antennae with scape curved, moderately thickened to apex. passing eyes; funicle of seven segnients ; club fairly large, of three segments, closely united, the first longer than the otliers combined, with fine pubescence. Eyes small, oval, coarscly facetted. Prothorax subquadrate, ocular lobes wanting: the antero-inferior margin lightly hollowed. Scutellum not visible. Elytra strongly clasping the body, wider than prothorax, sinuate at base. Mesosternum short, with its intercoxal process of moderate size, prominent, decliviouts to apex; epistcrna large, epimera very small, produced to a sharp point in front. Metasternum short, with its episterna narrow. Abdomen with first and second segments long, first a little longer than second ; third and fourth very short, equal; fifth a little longer than $t w n$
preceding combined. Anterior coxae almost touching; intermediate well separated; posterior widely separated. Legs of modcrate length; femora thickened in middle; tibiae arcuately widened and strongly spurred at apex; the posterior corbells open; tarsi with three segments only, the first obconic, the second almost globular, the third dilated, transverse, with a slight impression on its upper surface; tarsi spongiose beneath.

This genus is proposed for a small dingy weevil found in leaf debris which, at a glance looks like a Mandalotus, to which genus the late A. M. Lea considered it was closely allied, but its mouth is certainly not adelognathus. It hardly seems correctly placed in Rhyparosominae, as all the tibiae are distinctly mucronate, but it is less out of place there than in the other subfamilies, having the short metasternum.

The genus is dedicated to the memory of the noted Australian entomologist, Mr. A. M. Lea.

Gcnotype, C. umbratilis, n. sp.

## Cisolea umbratilis, n. sp.

(Figs. 21-28.)
Black, in parts diluted with red; antennae and tarsi reddish castaneous. Densely clothed on uppersurface, prosternum and legs with ferruginous scales interspersed with fairly long, coarse, curved setae; metasternum and abdomen moderately clothed with short, pale setae or pubcscence.

Malc.-Head and rostrum with rather fine rugose sculpture. Rostrum dilated to apex; with a rather narrow, but deep, sulcus from base to beyond insertion of antennae, and a finer one on either sidc, extending slightly on to the head. Antennae with scape slightly passing eye, distinctly thickened from middle ; first segment of funicle the length of the next three combined. Prothorax transverse, widest before middle, much narrowed to apex, base rounded; lightly ridged down centre and with a transverse impression near apex; with large, decp, reticulate punctures, Elytra strongly trisinuate at base, widened from hase for about a fourth of their length and then suddenly narrowed to apex: in places subtuberculate and with transverse ridges, the base of the third interstice raised, and the basal edge of the elytra narrowly reflexed; the striac with large, close punctures, nearly as widc as the interstices, the interstices with fine, close punctures. The whole undersurface with large. deep. rcticulate punctures. Front coxae touching. Metasternum and basal segment of abdomen with a large and fairly deep impression, which is lightly carried on to the sccond segment. All tibiae dilated and spurred at apex, the anterior and intermediate fairly strongly scooped ont near apex and the posterior thinned there.

Female.-Differs from the male in being a little wider, with the elytra not nearly so uneven and the metasternum and abdomen gently convex. Length, 3.50 mm .

Hab. New South Wales: Dorrigo (C. Oke) amongst decaying leaves in a dark and densely vegetated gully.

The whole upper surface is so densely covered by the scales that the sculpture is not visible before abrasion, and so one specimen has been completely denuded. On the lower surface each puncture has a pale, shining seta in its centre.

Types in coll. Oke.


Figs. 21-30.

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## Subfamily BELINAE.

## Isacantima papulosa Pasc. var. nigra, n. var

Some specimens from the Victorian Mallce represent a distinct variety of this well-known species. Specimens from New South Wales are distinctly reddish-brown, but all the Victorian ones are black and have the granules on pronotum and elytra slightly larger. The clothing of elytra is of two colours as in typical specimens, the dark-brown being of the same shade, but the pale patches vary from whitish, in some, to dark yellowish-brown in others.

Hab. Victoria: Gypsım. (J. E. Dixon, C. Oke.)

## Subfamily CRYPTORHYNCHINAE.

Nyella tuberculata Oke.
Proc. Roy. Soc. Vic. (n.s.), xliii. (2), p. 200, 1931.
The following is added to the original description:-
On detaching the head from a specimen mounted on its back a wide, distinct, pectoral canal becomes evident, though it is evenly clothed with the rest of the prostcrnums. The canal is bounded by ridges that terminate between the front coxae. Bchind the coxae the intercoxal process widens out, continues as a broad plate between the middle coxae and actually touches the metasternum, completely taking the place of the intercoxal process of the mesosternum, though the episterna and epimera of the latter are unusually large. The prosternum and metasternum arc actnally in contact, as previonsly illustrated in fig. 6 H (loc. cit.), the former having a narrow groove along its basal edge which receives the metasternum. On the inner side of each intcrmediate coxa there is a small projecting process which clasps the prostermun, on its outcr surfacc. The metasternum of the male has a rather shallow depression which dilates posteriorly and is continued on to the abdomen. The third and fourth segments of abdomen arc curved at the sides. All the femora are grooved, the front and middle oncs are dentate, the hind ones edentate. On the pronotum there is a loosely compacted fascicle, but it is easily abraded and is only distinct on one of the specimens in front of me, though indicated on some others. The claws are simple and smaller than on any other weevil, of its size, that I have seen.

By having its prosternum with a short canal this genus should apparently be referred to the Cryptorhynchinae, as now defined, but the displacing of the mesosternum and the small, almost hidden, claws are most unusual features.

## References.

1. Blackburn, T., Notes on Australian Coleoptera, Part XIV. Proc. Linn. Soc. N.S.W. (Second Series), viii., p. 258, 1893.
2. Lea, A. M. Descriptions of Australian Curculionidae, Part II. Trans. Roy. Soc. S. Aust., xxviii., p. 81, 1904.
3. Lea, A. M. Notes on Some Miscellaneous Colcoptera, Part VI. Ibid., p. 77, 1926.
4. Lea, A. M. On the Genus Mandalotus (Coleoptera, Curculionidae). Rec. S. Aust. Mus., iii., p. 149, 1926.
5. Lea, A. M., Ibid., Figs. 80, l, m, 1926.
6. Lea, A. M. Notes on Some Miscellaneous Coleoptera, Part VIII. Trans. Roy. Soc. S. Aust., 1v., p. 50, 1931.
7. Pascoe, F. Contributions towards a Knowledge of the Curculionidae Journ. Linn. Soc., x., p. 449, 1870.
8. Wytsman, P. A. G. Genera Insectorum, fasc. ii., 1910.

[^0]:    21. Mandalotus obliquus, n. sp. 22. Same, ventral surface. 23. Carina on abdomen of M . exilis, n . sp .

    24-30. Cisolea umbratilis, n. sp. 24. Dorsal view. 25. Side view. 26. Part of intermediate leg. 27. Antenna. 28. Apex of rostrum. 29. Maxilla. 30. Mandible.

